


BOARD OF COUNTY COMMISSIONERS

INTER-OFFICE MEMORANDUM

To: Honorable Chairman and Members
Leon County Board of County Commissioners

From: Herbert W. A. Thiele, Esq. 
County Attorney

Date: March 16, 2005

Subject: Status of City of Cairo "Clean Water Act" Matter

As you know, the County Attorney's office, at your initiation and request, has been working for about two years to address serious pollution problems emanating from the City of Cairo's failed sewage treatment works. The County Attorney's Office investigations identified extensive illegal discharges from the Cairo operation, leading to the filing of a 60-day "notice of intent to sue" letter under the Clean Water Act and ongoing negotiations with Cairo and Georgia EPD over this situation. The pollutants from Cairo, primarily phosphorus, nitrogen, and bacteria from human waste, are flowing down the Ochlockonee River and into Lakes Talquin and Iamonia. The phosphorus and nitrogen in particular are contributing to high levels of nutrients in the lakes that lead to poor lake conditions such as unwanted plant growth, excessive algae, and stress on fish and other populations.

We are very pleased to report a major success in our efforts that will go a long way toward eliminating Cairo contributions to the conditions in Lakes Talquin and Iamonia. Georgia EPD has published a proposed permit requiring the City of Cairo to construct a new sewage treatment facility and establishing strict new limitations on the quality of the discharge water from that plant.

Most importantly, at the urging of Leon County, the proposed permit requires Cairo to install a phosphorus treatment facility, with a specific and strict limit on the amount of phosphorus that the plant can discharge, at an additional cost to Cairo of \$750,000. The initial plant design did not include any nutrient controls and would thus have done little to protect Florida's two lakes from ongoing nutrient pollution. Commissioner Winchester, representatives from the County Attorney's Office, and the County's engineering consultant met with the City several times to discuss the need, among other things, for phosphorus treatment and urge the City to install adequate controls. The County also submitted its position, along with supporting data, to Georgia EPD. The proposed permit reflects the results of those negotiations, and the new

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phosphorus treatment should remove a significant source of nutrient pollution in Lakes Talquin and Iamonia. If violations of the permit phosphorus limit occur after the plant is constructed, the County could bring a Clean Water Act citizen suit action to stop the violations if necessary.

To our knowledge, this is the first time Georgia EPD has required any facility in Georgia on the Florida border to install nutrient treatment to prevent these pollutants from entering Florida waters. The hurdles to obtaining such a requirement for Cairo were substantial, especially since Georgia, unlike Florida, has no nutrient pollution standard restricting phosphorus or nitrogen pollution discharges. There are several other facilities north of the border which are also believed to be contributing large amounts of nutrients to the County's lakes, among them Thomasville's and Moultrie's treatment plants and an Englehard Corporation facility on the Attapulugus Creek. We expect to help initiate efforts to revise the permits and treatment for those facilities during their next cycle of permit review in 2005-2006.

Our office will continue to monitor and participate in the Cairo permitting process to ensure the required protections are included in the new permit when it is finalized. We expect to file comments on the proposed permit next week addressing other matters in the proposed permit. We will also monitor the construction of the facility to ensure that construction deadlines are met and that the facility meets the required permit limits. Pertinent portions of the proposed Cairo permit are attached hereto.

Again, we are very pleased at the outcome of our efforts, which have helped protect Leon County's lakes and saved the County significant dollars, all without having to resort to formal litigation.

Should you have any questions, please do not hesitate to contact the County Attorney's Office.

HWAT:cal

cc: Parwez Alam, County Administrator
Vincent Long, Assistant County Administrator
Gary Johnson, Director, Growth & Environmental Management
Tony Park, Director, Public Works
Theresa Heiker, Stormwater Management Coordinator
John Kraynak, Environmental Compliance Div, Growth & Environmental Management
Jennie Khoen, Public Information Officer
Neil Fleckenstein, Red Hills Planner

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

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Permit No. GA0025771

8.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The discharge from the water pollution control plant shall be limited and monitored by the permittee as follows effective on the date EPD provides written approval of completion of construction of the facility and written authorization to commence operation has been provided by EPD:

Parameter	Discharge Limitations mg/l (lb/day) unless otherwise specified		Monitoring Requirements		
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type	Sample Location
Flow-m ³ /day (MGD)	11355 (3.0)	14194 (3.75)	Seven Days/Week	Continuous Recording	Effluent
Biochemical Oxygen Demand (5-day)					
May-October	10 (114)	15 (142)	Three Days/Week	Composite	Influent and Effluent
November - April	13 (148)	19.5 (185)			
Total Suspended Solids (TSS)	20 (228)	30 (284)	Three Days/Week	Composite	Influent and Effluent
Ammonia (as N)			Three Days/Week	Composite	Effluent
May-October	1.5 (17.1)	2.25 (21.3)			
November - April	2.3 (28.2)	3.45 (32.7)			
Fecal Coliform Bacteria (#/100 ml)	200/100 ml	400/100 ml	Two Days/Week	Grab	Effluent
Total Phosphorus (as P)	1.0 (11.4)	1.5 (14.2)	Three Days/Week	Composite	Effluent
Total Residual Chlorine (TRC)	0.011*	NA (NA)	Seven Days/Week	Grab	Effluent
Chronic Whole Effluent Toxicity (WET) Testing**	NA (NA)	NA (NA)		Composite	Effluent
Priority Pollutants***	Report mg/l	NA (NA)		Grab	Effluent
Ortho-Phosphorus****	Report (Report)	NA (NA)	Three Days/Week	Composite	Effluent

The pH shall not be less than 8.0 standard units or greater than 8.5 standard units and shall be monitored on the final effluent by analyzing grab samples taken seven days per week.

The minimum effluent dissolved oxygen shall be 6.0 mg/l or higher and shall be monitored on the final effluent by analyzing grab samples taken seven days per week.

*This is a daily maximum limitation for TRC and shall be analyzed to the specific detection limit of 0.10 mg/l.

**Refer to Part I.C.9. Definitive tests must be run on the same samples concurrently using both *Caridodephnia dubia* and Fathead minnows (*Pimephales promelas*). The testing must incorporate the most current U.S. Environmental Protection Agency chronic aquatic toxicity testing manual. The referenced document is entitled "Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, 4th Edition, EPA-821-R-02-013, October 2002" or the most recently approved addition.

***Refer to Part I.C.10.

****Refer to Part I.C.11